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CASES OF OVARIOTOMY.

BY G. KIMBALL, M.D., OF LOWELL, MASS.

[Communicated for the Boston Medical and Surgical Journal.—Continued from p. 452.]

CASE VI.—Mrs. C.——, of Worcester, twenty-seven years of age, married nine years, and had borne nine children; of excellent constitution, and always enjoying good health till three years since, when she noticed an enlargement on the left side of the abdomen.

Upon applying to her physician, Dr. A. L. Hobart, she was informed that her disease was of ovarian origin, and that medical treatment would avail little or nothing in the way of giving relief. He also suggested, at the same time, that in his belief the only means of cure was *extirpation*. The nature of the operation, as well as the chances of surviving it, having been fairly stated, the patient, after a few days deliberation, concluded to submit to it.

In pursuance of a request from Dr. Hobart, coupled with a statement of the above-named facts, I visited his patient on the 19th of December, 1863. An examination of the case showed that it was manifestly one of ovarian tumor, and probably a single cyst; that although of large size, it had not yet seriously impaired the system, and that in every external appearance, it was a proper case for an operation.

All preliminary arrangements having been previously attended to, the operation was accordingly performed the same day—in the presence of Drs. Hobart, Sargent, Bates, and other members of the profession in Worcester.

The tumor being found free from adhesions, its removal was effected without difficulty, and in a manner in all respects like what has been already given in the case of the young lady in Plymouth (Case No. III.), and published in the BOSTON MEDICAL JOURNAL of last month. The following communication from Dr. Hobart will be reckoned as sufficiently full and explicit, as to the subsequent history of this case:—

"For one week after the operation the pulse of our patient was uniformly 100—hard and wiry; after that time it came down at the rate of two per day, till it fell to seventy.

"I kept her on water, then gruels, then broth, and finally on bread and meat till well. To give rest and comfort, I dosed her freely with morphine; and, as a peculiarity (and what I believe to be an improvement), I *gave no laxative*, but left the bowels to take care of themselves, which they did perfectly; and passed the first fæcal matter, quietly, easily, and naturally, at the end of twenty-five days, when all was well.

"I kept her in bed five weeks; but I think she might have risen sooner. In seven weeks she walked the streets, and attended church; from that time she has done her own work (I mean that of her own family), with all the comfort of former years. She tells me she never in her life felt stronger or firmer than now, and in all respects her health is as perfect as possible."

MENSTRUATION AND ITS CONNECTION WITH UTERO-GESTATION.

By Amos Nourse, M.D., Bath, Maine.

[Communicated for the Boston Medical and Surgical Journal.]

Until recently the subject of menstruation, though much discussed, has been but little understood. The discovery that it occurs simultaneously, or nearly so, with the disengagement from the ovary of a mature ovum, advances us at least one step in knowledge, and may lead, if properly followed up, to a pretty definite comprehension both of its relations and object. Indeed, in the opinion of some physiologists, it has already done so—they regarding it as fully proved that ovulation and menstruation are absolutely identical—part and parcel of the same process—the discharge of a mature ovum being the actual function, while the bloody discharge from the uterus is but the outward sign or manifestation. And the analogy of nature is invoked to prove that the season of menstruation in the human female corresponds entirely to that of heat in other animals.

To this doctrine, thus broadly stated, I have never been able to yield my assent. It seems to me to contradict established facts. If it were true, the sexual passion of the human female should be strongest while the menstrual flow is upon her; and who does not know the fact to be directly otherwise?

Then, too, in all our domestic animals, copulation, in order to be effective, must be had during the heat; and so, if the analogy insisted on is to be trusted, there is not an individual existing in this wide world, who was not begotten in that season of uncleanness, when women instinctively shrink from contact!

No wonder that the argument from analogy leads us here to such absurd conclusions, for it has no solid substratum to rest upon. If

it were apparent, or could be proved, that the phenomena connected with generation in man and other animals were entirely analogous so far as known, that to be sure would afford a presumption more or less strong in favor of identity in those concealed from view. But there is no such general agreement—far from it. In the animals we are acquainted with, not only is the season of heat the only time when the overtures of the male meet a gracious reception, but, at all other times, any advances on his part are sure to be very significantly, if not spitefully, repelled. And, if intercourse, under such circumstances, is forced upon the female, it is never found to be effective.

Again, indications of sexual passion are never witnessed in animals during the pregnant condition. How entirely different in the human species, I need not say. Now, in view of such diversities, and even contrarieties, who does not see that any attempt to reason from analogy, so far from enlightening, can only tend to mislead?

In considering and discussing the subject of menstruation, we are apt, consciously or unconsciously, to take it for granted that it has something to do in effecting fecundation. But to my mind, such an assumption is wholly gratuitous. That menstruation gives indication of a *capacity for impregnation*, we have abundant proof, both negative and positive. But that it exerts even the smallest agency in accomplishing the fecundating act, has never yet been proved, nor, as I think, rendered even probable.

The all-important functions of the uterus are, so far as known, to give lodgment to the embryo—to furnish pabulum for its growth and development—and, at a proper time, to expel it. These all, it will be perceived, have relation, not to conception, but to utero-gestation. Is or is not the function of menstruation subsidiary to the same process? We shall see.

If we glance for a moment at the successive steps in the process of reproduction, two things can hardly fail to attract our notice. One is the remarkable, and almost intelligent sympathy felt and expressed by and between the organs concerned; and the other, the wonderful changes, both in dimensions and structure, which the uterus is made to undergo, preparatory to, and in the performance of, the special functions which the pregnant condition devolves upon it. And these two phenomena, if properly considered, furnish, in my judgment, a key to the mystery we are endeavoring to solve.

Dr. Dalton informs us that no sooner is the generative process commenced, than the lining membrane of the uterus assumes a changed, and altogether peculiar structure, fitting it for imparting to the embryo the nourishment it requires. And Dr. Janser, on carefully inspecting the uterus of a girl murdered four days after menstruation, found the structure and appearance of its mucous surface to be precisely such as, according to Dr. Dalton, belongs to incipient pregnancy. To quote his own words, "it results," he says, "from this

observation that the mucous membrane of the uterus presents, during menstruation, characters analogous to those which exist during gestation."

Now how comes it about that this remarkable change of structure, wrought out once a month in and by the process of menstruation, should constantly occur in the non-pregnant state, as well as when conception has taken place?

If we consider well the circumstances under which it occurs, and keep in mind, too, how continually the action of one organ in the sexual system is influenced, and even controlled, by the state and condition of another, the change in question will cease to be the subject of marvel, and the wonder will be rather that the why and the wherefore have so long been overlooked.

Why is it that, so soon as the uterus has taken into its custody and maintenance a vivified germ, the mamma proceeds at once to take upon itself a new and peculiar action preparatory to the new function it instinctively feels it is about to be called upon to perform, viz., that of lactation?

How is it, too, that, when the process of utero-gestation is approaching its natural termination, the structure of the cervix uteri, of the vagina, of the external labia, and even of the perinæum, becomes so changed as to enable them to bear with impunity the impending strain that would otherwise prove fatal to their integrity? In both cases the organs concerned almost seem to be endowed, not only with intelligence, but with forethought. Certain things, they perceive, are taking place in their associate organs, the result of which is to be that a new and laborious duty will shortly be thrust upon them, and they proceed to prepare for it.

In like manner, when the ovarium is maturing a germ, the nucleus of an embryo that is to be, the uterus takes note of the fact, and recognizes in it the commencement of a process in which she is to play a most important part. True it is, as *we* happen to know, that all this labor on the part of the ovary may go for nothing, and the product become effete; but this the uterus does not know—how should it? It can take cognizance only of what transpires in the system to which it belongs, and of which it forms a part. And, so far as the work of that system is concerned, the embryo is already perfected, when the germ is fully matured. As soon, therefore, as this process is nearly completed, the uterus feels herself called upon to prepare for the reception and nutrition of the product. Whether or not the anticipated event is destined to be realized, time and chance must determine. But she has no knowledge of or control over that contingency. The ovary, she knows, is engaged, seriously and in earnest, in the great function of reproduction, the special office for which nature formed and fashioned it; and she doubts not, has no occasion to doubt, of its success in the performance of it. It is her business, therefore, in every case in which a mature and

perfect ovum is being elaborated, to prepare for its reception, in utter disregard of the question of fecundation, which she could not settle if she would. She does thus prepare herself; and the process in and through which the requisite change of structure is effected, we call menstruation. It has nothing to do, if I judge rightly, either in promoting or preventing the fecundating act, but is simply a preparation of the uterus for a fitting discharge of the new duties which prospective utero-gestation is about to impose.

This view of the subject gives to menstruation an intelligible object and office. How it is that the bloody discharge becomes instrumental in effecting the contemplated change of structure, or why it should be regularly and constantly incidental to the process, I pretend not to understand, and shall not attempt to explain. It is the *result* alone of menstruation that I have to deal with. And that result, according to Dr. Janser, is a change of organization in the mucous lining of the uterus, precisely similar to that which belongs to the early stage of utero-gestation.

Now, should this asserted identity prove, after all, to be purely imaginary, I shall perhaps have little to say in defence of the views I have here submitted. But, should future observations confirm the truth of Janser's statement, and the appearances described by him be found uniformly to attend the menstrual process, then I see not how the conclusion I have arrived at can well be avoided.

Bath, June 22d, 1864.

SARATOGA SPRINGS.

[Communicated for the Boston Medical and Surgical Journal.]

Messrs. Editors,—Now is the time for physicians to send their "chronic cases" to Saratoga. Never has the village been in a better condition to receive them, than at present. Extensive improvements have been made in nearly all the large hotels, and private boarding-houses have been enlarged and improved, so that our capacity for accommodating boarders has been increased nearly one quarter since last season.

Invalids have been coming in since May. Dyspepsia, hypochondria, and most of the nervous diseases, are well represented. Not a symptom is wanting. Great numbers of scrofulous patients visit us, especially from the New England States; together with patients affected with the different kinds of skin diseases, rheumatism, urinary diseases, and "miserable chronic cases," from all parts of the country. Now, Gentlemen Editors, strange as it may appear, most of these invalids are improved by a judicious use of our mineral water, and many *entirely recover.*

No doubt our fine air and healthful climate contribute essentially to these results, as well as relief from home cares and business.

Yet the effect of our mineral waters on these cases is most decidedly alterative and tonic.

These are gently or strongly cathartic, as you desire; they never prostrate, and work upon the secretions with great rapidity.

The first, and almost immediate results, are improved appetite, good digestion, better assimilation, good sleep, and increased strength.

Congress water, as usual, is drank freely as a beverage and as a pleasant cathartic, but most of our invalids drink Empire water, finding it more generally admissible, and more certain in its effects.

This spring has become very popular, and the greatly increasing demand for the water has obliged the Company to enlarge their facilities for bottling. I understand that large and commodious buildings for this purpose are to be erected this season. This is the great iodine spring, and can be used freely in pulmonary diseases. The revenue tax for the last month was $551.30, being over $150 more than that of the Congress, for the same month. This will give you some idea of the amount of sales.

We have the promise of a prosperous season. The number of arrivals so far exceeds that of last year to this date.

Truly yours, S. E. WHITING.

Saratoga Springs, July 1, 1864.

ON THE COMPARATIVE VALUE OF SULPHURIC ETHER AND AMMONIA AND CHLORIC ETHER AND AMMONIA AS ANTISPASMODICS IN TYPHOID FEVER.

BY HENRY ROBINSON, M.D., M.R.C.P., LOND., Consulting Physician to the Southampton Dispensary.

To record, by any given treatment, a single case of fever would scarcely merit a space in a medical journal; but when an opportunity offers itself for testing the therapeutic value of two remedial agents, such as sulphuric ether, and chloric ether or spirit of chloroform, the medicinal properties of which are so nearly allied to each other, the result may be worthy of attention.

A gentleman about twenty years of age contracted typhoid fever, which on or about the fourteenth day presented very unfavorable symptoms, and I was requested to meet in consultation the gentleman who was in attendance. I found the lips, teeth, and tongue thickly incrusted with black sordes; pulse 120; skin hot and dry; rose spots over the chest, &c.; great intolerance of sound; delirium, but partial sensibility at times, though he was unable to articulate distinctly. No tenderness was evinced on pressure being made over the right iliac fossa or other parts of the abdomen. The motion which had passed the previous night presented a reddish color, and was somewhat indurated; and the urine gave a lateritious de-

posit on standing. Being informed that wine had caused very great excitement, and observing a tendency to subsultus tendinum, we agreed to give chloric ether in combination with carbonate of ammonia.

Towards evening the unfavorable symptoms were more pronounced, and I was again requested to see the patient; but my colleague in the case could not make it convenient to attend. Wishing to know the effect produced by the mixture ordered in the morning, I administered a dose of it myself; and, finding no mitigation of the symptoms, resolved to try the effect of wine, which, though cautiously administered, produced so much excitement that it could not be continued with safety. I then gave ammonia and chloroform, omitting the spirit contained in the so-called chloric ether, but without effect; and the tetanic spasms had reached their acme. Involuntary evacuations took place, and the pulse was too rapid to be counted; there was total insensibility to those around him; violent convulsive movements, especially of the right arm, which was contracted upon the chest, and one leg was similarly affected; while the jaws were spasmodically closed. I then ordered a mixture of sulphuric ether and carbonate of ammonia, in the same proportion as the chloric ether and ammonia; and the moment the muscles of the jaw had relaxed sufficiently to admit a teaspoon, the mixture was administered in divided doses, and immediate effect was produced, as shown by the general tranquillity throughout the system. The convulsive movements returned, however, at short intervals; and some time was lost by the locking of the teeth, but this was ultimately overcome by passing a bottle containing chloroform under the nose of the patient, and when the spasm ralaxed the mixture was introduced, care being taken not to over-stimulate. Cold applications to the shaved head served to regulate the stimulating effects of the medicine; while ice, beef-tea, and beef essence, were given between each dose of the medicine.

In such a case it was necessary to stand by the bedside during the night, and to administer the remedies chiefly with my own hands; but early in the morning I had the satisfaction of seeing the patient tranquil.

Not being convinced that so great a difference could exist between sulphuric ether and chloric ether or chloroform in arresting tetanic convulsions, I made one or two more trials of the chloric ether and ammonia, but no effect was produced by it.

It may be requisite to state that I found the addition of ipecacuanha wine, in the dose of three to five drops, materially assist in removing the sordes and promoting perspiration. We cannot, I believe, assign any chemical action to ammonia, sulphuric ether, and ipecacuanha, in removing the morbid matter of typhoid from the blood; the action must therefore be physiological. I have on a former occasion pointed out the value of ipecacuanha as a febrifuge in

combination with the mixed nitric and nitrous acids in typhoid, but the action of these acids is chemical as well as physiological; they cannot, however, be given when subsultus tendinum or tetanic spasms are present.

It is necessary perhaps to mention that the patient showed the first signs of sensibility by calling for water, which the nurse gave him in considerable quantity; and when I entered the room, after being absent for a few hours, he craved for more water, though unable to swallow it when put to his mouth. I at last satisfied his demand by adding a little ipecacuanha wine to a glass of water, and one tablespoonful of it sufficed to appease thirst.

Recovery progressed as rapidly as nature could allow, and the contracted arm and leg were restored by embrocations, sponging, &c. —*London Lancet.*

STATISTICS OF POPULATION.—FACTS FROM THE CENSUS OF 1860.

THE *Journal of Commerce* furnishes some valuable facts from the forthcoming volume of the Census Report. The introduction to the volume contains the summing up of statistical results, for which the country is indebted to the steadfast labors of Mr. Kennedy, the Superintendent of the Census Bureau. These results bring before the people of the country a great many remarkable facts, some of which we notice.

The proportion of the numbers of the two sexes is different in this country from Europe. In Great Britain and Ireland there are 877,000 more females than males, in a population of 29,000,000, while in the United States, in a population of 31,000,000, there is an excess of 730,000 males over females. But this excess is not uniform in all parts of the country. Thus Massachusetts has 37,600 more females than males, while Illinois has 92,000 more males than females. California has 67,000 more males than females; Michigan has 40,000, Texas 36,000, Wisconsin 43,000; while in Colorado the proportion of men to women is twenty to one. This is, doubtless, the result of emigration. In Utah, notwithstanding polygamy, the numbers are about equal; in New York the females are a little more numerous; in Pennsylvania the males are a few more than the females.

On the subject of immigration the statistics are valuable and suggestive. The following is nearly the exact immigration for the three census periods:—

In the ten years previous to June 1, 1840	552,000
" " " 1850	1,558,300
" " " 1860	2,707,624

The largest number of emigrants arriving here are between 20 and 25 years of age. Over twenty per cent. of the whole immigration is of persons of this age. Fourteen per cent. are between 15

and 20, sixteen per cent. between 25 and 30; seven per cent. are children under 5. A most interesting table has been compiled by Mr. Kennedy, showing the occupation of the immigrants for each ten years from 1820 to 1860. We take the total, covering the whole period:—

OCCUPATION OF PASSENGERS ARRIVING IN THE UNITED STATES FROM FOREIGN COUNTRIES DURING THE FORTY-ONE YEARS ENDING WITH 1860.

Occupation.	1820 to 1860.	Occupation.	1820 to 1860.
Merchants	231,852	Artists	2,490
Farmers	764,837	Teachers	1,528
Mechanics	407,524	Musicians	729
Mariners	29,484	Printers	705
Miners	39,967	Painters	647
Laborers	872,317	Masons	2,310
Shoemakers	3,474	Hatters	256
Tailors	3,634	Manufacturers	3,120
Seamstresses and Milliners	5,246	Millers	631
Actors	588	Butchers	945
Weavers and spinners,	11,557	Bakers	1,272
Clergymen	4,326	Servants	49,494
Clerks	3,882	Other occupations	26,206
Lawyers	2,676	Not stated	2,978,599
Physicians	7,109		
Engineers	2,016	Total	5,459,421

The preponderance of "laborers" is very great. Farmers are next in number; then mechanics, merchants, &c. The table of nativity of population presents a subject of peculiar interest. Here is the grand total:—

	Census of 1860.	Census of 1850.
Born in the United States	23,301,403	17,737,568
Born in foreign countries	4,136,175	2.210,839
Birthplace not stated	51,883	39,154
Total free population	27,489,461	19,987,571

The different races and nations in the United States are represented as follows:—

	Census of 1860.	Census of 1850.	Proportions in 1860.
Ireland	1,611,304	961,719	38.94
Germany	1,301,136	573,225	31.45
England	431,692	278,675	10.44
British America	249,970	147,700	6.05
France	109,870	54,069	2.66
Scotland	168,518	70,550	2.63
Switzerland	58,327	13,358	1.29
Wales	45,763	29,868	1.11
Norway	43,995	12,678	1.07
China	35,565	758	0.86
Holland	28,281	9,848	0.68
Mexico	27.466	13,317	0.66
Sweden	18,625	3,559	0.45
Italy	10,518	3,645	0.26
Other countries	60,145	37,870	1.45
Total foreign born	4,136,175	2,210,839	100.00

Many readers will be surprised at the closeness with which the

German numbers rival the Irish. The distribution of the foreign element is worthy of careful notice. By the following table it seems that North Carolina exceeds all other States as a native-born American population. Arkansas is next. California has the largest proportion of foreign-born population, owing, doubtless, to the fact of its late acquisition, with a large Mexican population then in it. Wisconsin is next in order. Minnesota next.

PERCENTAGE OF THE NATIVE AND FOREIGN POPULATION IN 1860.

States and Territories.	Total Natives.	Total Foreign.	English.	Irish.	German.
Alabama	98,72	1,28	0,12	0,59	0,27
Arkansas	99,14	0,86	0,09	0,30	0,26
California	52,02	47,98	4,00	10,85	7,10
Connecticut	82,46	17,54	1,93	12,05	1,85
Delaware	91,82	8,18	1,41	5,41	1,13
Florida	97,64	2,36	0,23	0,60	0,34
Georgia	98,90	1,10	0,11	0,62	0,23
Illinois	81,03	18,97	2,44	5,12	7,65
Indiana	91,25	8,75	0,69	1,81	14,94
Iowa	84,29	15,71	1,71	4,16	5,71
Kansas	88,16	11,84	1,31	3,63	4,03
Kentucky	94,83	5,17	0,39	1,93	2,36
Louisiana	88,56	11,44	0,56	3,98	3,48
Maine	94,04	5,96	0,43	2,44	0,06
Maryland	88,72	11,28	0,62	3,62	6,39
Massachusetts	78,87	21,13	1,94	15,07	0,81
Michigan	80,09	19,91	3,44	4,01	5,18
Minnesota	66,22	33,78	1,99	7,37	10,59
Mississippi	98,92	1,08	0,11	0,49	0.25
Missouri	86,41	13,59	0.85	3,68	7,50
New Hampshire	93,58	6,42	0,70	3,91	0,13
New Jersey	81,73	18,27	2,36	9,23	5,03
New York	74,27	25,73	2,73	12,84	6,61
North Carolina	99,67	0,33	0.07	0,09	0,08
Ohio	85,97	14,03	1,40	3,28	7,19
Oregon	90,24	9,76	1,32	2,41	2,06
Pennsylvania	85,19	14,81	1,60	6,95	4,74
Rhode Island	78,58	21,42	3,64	14,48	0,47
South Carolina	98,58	1,42	0,11	0,70	0.38
Tennessee	98.09	1,91	0,18	1,12	0,35
Texas	92,81	7,19	0,28	0,58	3,40
Vermont	89,61	10,39	0,52	4,28	0,07
Virginia	97,81	2,19	0,26	1,03	0,66
Wisconsin	64,31	35,69	3,94	6,44	15 97
District of Columbia	83,37	16,63	1,37	9,66	4,33
Territories	83,89	16,11	4,45	2,31	1,86
Total in the United States	86,85	13,15	1,37	5,12	4,14

The following is Mr. Kennedy's condensation of certain facts derived from the census table:—

I. The largest number of foreigners reside in the following States in their order, to wit: New York, Pennsylvania, Ohio, Illinois, Wisconsin, Massachusetts. It will be observed that the total population also follows the same order, as regards the first four States, indicating a similarity of composition of native and foreign.

II. Foreigners reside in the least numbers in North Carolina, Florida, Arkansas, Oregon, Mississippi, Delaware.

III. *The greatest foreign increase*, from 1850 to 1860, has been in New York, Illinois, Wisconsin, Pennsylvania, California, Ohio.

IV. *The least foreign increase*, from 1850 to 1860, has been in Vermont, Florida, North Carolina, South Carolina, Arkansas.

V. The greatest number of English reside in the States of New York, Pennsylvania, Illinois, Ohio, Wisconsin, Michigan.

VI. The least number of English reside in Florida, Arkansas, Oregon, North Carolina, South Carolina. Mississippi.

VII. The greatest number of Irish reside in New York, Pennsylvania, Massachusetts, Illinois, Ohio, New Jersey.

VIII. The smallest number of Irish reside in Florida, North Carolina, Oregon, Arkansas, Texas, Kansas.

IX. The greatest number of Germans reside in New York, Ohio, Pennsylvania, Illinois, Wisconsin, Missouri.

X. The least number of Germans reside in Vermont, Maine, New Hampshire, Florida, North Carolina, Rhode Island.

XI. It will further be found that 3,582,999—that is, 86.60 per cent. of the whole number of foreign-born—were inhabitants of the free States, and 553,176, or only 13.40 per cent., of the slaveholding States. In 1850, the corresponding percentages were 88.94 and 11.06, respectively, or as 8 to 1. In other words, for each white immigrant located in the slaveholding States, eight have settled in the free States.

XII. The decennial increase of the foreign population from 1850 to 1860 has been 87.1 per cent., being nearly a doubling of numbers; in some States more, and in others less. In round numbers, the State of New York has a million of foreign residents, which is a fourth part of all in the United States, and also a fourth of the total population of the State; but, on an average of all the States, the number of foreigners is about one eighth part of the whole population.—*Hunt's Merchants' Magazine.*

Reports of Medical Societies.

EXTRACTS FROM THE RECORDS OF THE BOSTON SOCIETY FOR MEDICAL IMPROVEMENT. BY FRANCIS MINOT, M.D., SECRETARY.

JUNE 13th.—*Conical Stump due to the natural growth of the Humerus after an Amputation performed in childhood. Neuromatous condition of the Nerves.*—Dr. HODGES showed the specimen.

J. H., aged 18, had his right arm amputated above the elbow when 9 years old. The stump healed rapidly, and for two years was perfectly round and smooth, without any projection of the bone. The cicatrix is linear and distinct at the present day, and the integument generally is healthy and as movable as elsewhere. The amputation

was apparently a flap operation. During the last seven years the end of the humerus has been growing more and more prominent, and now projects in one of the flaps to the extent of an inch, the protrusion in no way implicating the cicatrix. The integument has grown thin and shiny over the extremity of the bone, where there is an obvious bursa, and threatens to be perforated. The stump is the seat of severe neuralgia, and what proved to be neuromatous tumors could be easily felt before the operation. This consisted in the removal of a portion of the integument and 2½ inches of the bone. On dissection, all the nerves were found to terminate in large bulbous tumors, and the bursa over the end of the bone contained a great number of minute loose bodies, similar to those frequently found in synovial cavities. The bone itself was healthy, and gradually tapered to a point. Twenty days after the operation the patient left the Hospital for his home in New Hampshire, the wound nearly healed, and without any recurrence of the neuralgia.

Dr. Hodges referred to a number of similar cases collected in his Essay on the Excision of Joints. Its history, the well-formed stump, healthy cicatrix and absence of all retraction of the soft parts, combined to show that the deformity in this instance was due to a growth of bone continuous with the growth of the boy's body, such as has been frequently noticed to follow amputations performed in childhood, and not the ordinary conical stump occasionally observed after amputations with insufficient flap.

JUNE 13th.—*Excision of the Knee-joint for Deformity.*—Dr. HODGES showed the specimen.

M. C., aged 15, when 3 years old sprained his knee, but not sufficiently to prevent its continued use in walking. Four years later he was laid up with an acute inflammation of the joint, due, as he thinks, to a cold caught from exposure in swimming. He has not been able to walk upon the limb since. The knee is fixed at an angle of 110°, is painful and sensitive on pressure, considerably enlarged and distorted. A sinus, connecting apparently with the articulation, opens on the inside of the leg. The general health of the patient being good, a consultation advised excision of the articulation.

A transverse incision was used to expose the joint. Considerable force was required to break down the old false anchylosis which existed. The patella was consolidated with the femur and removed with the condyles. There was but a limited amount of active disease. About two inches of bone were removed, and the diseased synovial membrane cut away with the scissors. The hamstring tendons were divided, and the incision carried well down upon the sides to permit a free escape of the subsequent suppuration.

The rigidity of the nerve and vessels in the popliteal space rendered the straightening of the limb a matter of considerable difficulty, even after so large an amount of bone had been sacrificed. During the first 48 hours following the excision, there was also a strong tendency to displacement, which was overcome by straps and firm compression; but now, four weeks after the operation, there is some stiffening of the bones, the suppuration has diminished, and the limb is in a promising condition.

JUNE 13th.—*Omental Hernia.*—Dr. HODGES exhibited the specimen, which was from a patient of Dr. J. H. BLAKE; a fleshy but healthy

man, 59 years old, who, eleven months since, detected a small, painful tumor, occurring without assignable cause, in the left groin. That it was a hernia, composed exclusively of omentum, was obvious on examination. The pain and inflammation of which it has since been continually the seat, occasionally confining him to his bed, and disqualifying him for even light and easy labor, led the patient to seek relief in an operation. This was performed in the usual manner, and the mass of omentum, equal in size to a pullet's egg, cut off below a single ligature tied around it at the neck of the sac. The operation was performed June 8th, and complete recovery has followed.

June 27th.—*Suicide by cutting the Throat.*—Dr. Cheever reported the case.

The patient was a man, 33 years old, a tailor, who cut his throat with a razor, while laboring under insanity. He was brought to the City Hospital three hours afterwards, in a state of great prostration from hæmorrhage. An attempt was made to bring on reaction by injecting stimulants into the stomach, the œsophagus having been divided by the razor. Brandy was also administered by the rectum, and tracheotomy was done by Dr. C. The patient's breathing was much relieved, but he died, eighteen hours after his entrance into the hospital.

On examination of the wounded parts, *post-mortem*, it was found that the thyroid cartilage was cut through on both sides, just above the vocal chords, but on one side lower than the other The pharynx also was opened. The carotids were uncut, the hæmorrhage having been from the superior thyroid artery.

THE BOSTON MEDICAL AND SURGICAL JOURNAL.

BOSTON: THURDSAY, JULY 21, 1864.

The Trial of La Pommerais.—Many of our readers have undoubtedly noticed the reports of the recent trial of La Pommerais in Paris for the murder of his mistress, and the later account of his conviction and execution. The history of this remarkable case is briefly as follows:—The accused was a homœopathic practitioner. He had induced his victim, Madame de Pauw, to obtain insurance upon her life to the amount of £22,000, and to assign the assurances to himself. Some time previously to the event we are recording, he bought three grammes of digitaline, of which fifteen centigrammes only were found remaining in his possession, and the scientific men employed by the government reported as the result of their experiments, which we shall proceed to state, their conviction that the deceased had been poisoned by this substance. It is well known that there are several alkaloids capable of producing most fatal and rapid effects upon the human economy, which, in the present state at least of chemical science, cannot be recognized by chemical tests. It becomes a question of grave importance, therefore, how far evidence resting upon physiological experiments alone shall be admitted in medico-legal cases. Hitherto it has been allowed only in confirmation of other proof, but

in the present case more weight was attached to it in the French court of justice than our knowledge of the physiological action of organic substances upon animal life would seem to authorize. There can be no question as to the justice of the decision against La Pommerais, but it seems to us that it would be very dangerous to infer from the scientific evidence alone, however brilliantly and skilfully prepared, that digitaline was the poison employed by him. The following account of the trial is taken from the excellent report published in the London *Medical Times and Gazette.*

"It was on the 17th of November last that M. Paul Blachez was called to attend Madame de Pauw. On his arrival, he found her in a dying state. She was apparently unconscious, at least it was impossible to elicit any sign from her; her body was covered with an abundant cold sweat; there was great disturbance of the circulation, the pulse being irregular and intermitting. She cried out continually, in a weak voice, 'Oh, my head! oh, my head!" She retched several times, but whilst he was with her did not vomit freely. She then fainted so completely that her pulse entirely disappeared, a whitish froth escaped from her mouth, and she died. He at the time attributed her death to the rupture of an aneurism. * * * *

"Thirteen days after death, her body was exhumed under the superintendence of M. Tardieu, Professor of Legal Medicine and Dean of the Faculty of Medicine in Paris. The body and external organs were in a state of perfect preservation—so perfect that had any lesions, the result of previous disease, been present, they would have been at once recognized. The results of the autopsy were entirely negative. The heart was unaltered in size, and its valves acted perfectly. The blood was semi-coagulated, but there was an absence of clots. The lining membrane of the stomach was perfectly healthy; that of the intestines presented some sanguineous infiltrations, but they were few in number. The deceased was advanced seven or eight weeks in pregnancy. The chemical analysis, which was conducted by M. Roussin, was made by obtaining alcoholic and watery extracts of a portion of the stomach and intestines. The solid residue exhibited no trace of mineral poison, neither was any organic poison which could be isolated obtained from the extracts.

"Shavings of the floor of the apartment on which the deceased had vomited were also procured, and for the purpose of comparison shavings from the floor of a different part of the room. From the former sixteen grammes and a half of alcoholic extract were obtained. This had a brown color, a peculiar rancid and oily odor, and a very bitter taste. On incineration it left no metallic residue; it was precipitated abundantly by tannic acid; the addition of sulphuric acid turned it of a reddish purple color, and hydrochloric acid produced a green tint. The extract of the shavings which were unsoiled by the vomited matters had an aspect and odor closely resembling the preceding, but it had no bitter taste, it was not precipitated by tannic acid, and only slightly colored by sulphuric and hydrochloric acids; the tints struck by these acids were entirely different from those produced in the former extract.

"It was clear that this result proved nothing as to the existence of poison. The change in color produced by sulphuric acid, and the precipitation by tannic acid, are reactions common to many organic

matters, and, as was observed by M. Hébert, the green color which followed the addition of hydrochloric acid would have been a more important indication had the chlorophyll of the vegetables (cauliflower and sorrel) which she had eaten, and the green coloring matter of the bile, been previously removed. In the failure of their chemical investigation, therefore, the experts had recourse to physiological experiment.

"The first trial was made with the extract obtained from the shavings of the floor on which deceased had vomited. At five minutes past one a dog was inoculated with five grammes of this extract, introduced by two incisions on the inner surface of the thighs. At half past three the animal vomited thrice. The vomited matters were glairy and bilious. The pulse, which at the commencement of the experiment was 110, had fallen to 94; it was irregular and intermittent. The beat of the heart was irregular and intermittent, at times appearing to cease suddenly, and then becoming rapid. The respirations were slightly intermittent. At half past four the heart-beats fell to 76, and the animal again vomited. At eight in the evening, it could stand with difficulty. The slightest movement appeared painful, and provoked vomiting. The heart-beats were still irregular, and 68 in the minute. At eight the following morning the animal was cold, but sensible. The heart-beats were less strong, and had fallen to 40. Their irregularity and intermittence were very remarkable. Respiration was jerking and intermitting. The animal died at eleven o'clock, apparently without pain. There was no coma. The examination of the body was made two hours after death. The ventricles of the heart were markedly contracted, although the auricles were dilated. All the cavities of the heart were filled with black, thick, and partly coagulated blood. On removing the pericardium, some elevations of a vivid red color were observed on the surface of the heart near the apex.

"2d Experiment.—Two grammes of the same extract were administered by the mouth to a rabbit. Great irregularity of the heart's action ensued. The beats fell to 41 in a minute. The animal died in two hours and three quarters from the administration of the extract. The cardiac auricles were found dilated, the ventricles contracted, the latter strongly contrasted by their blackish color with the rest of the organ. The interventricular space was remarkably depressed. The apex of the heart was of a vivid red color, and the walls presented several red elevated spots.

"The third experiment was one made for the sake of comparison with the extract obtained from the shavings of the floor, on which the vomited matters had not fallen. Four grammes of this extract were administered to a rabbit. It did not vomit, nor was it in the least incommoded, and two days afterwards it continued in perfect health.

"The fourth experiment was made with the alcoholic and aqueous extracts obtained from the stomach and intestines of the deceased. Five grammes of a mixture composed of equal parts of these extracts were introduced into an incision made on the inner surface of the thigh of an adult vigorous dog. At three o'clock the animal's pulse beat 102 in a minute. At half past four it seemed depressed, anxious, it respired with difficulty, and its pulse had fallen to 86, and the heart's action was irregular and intermittent, but less so than in the case of

the dog experimented on with the vomited matters. The animal vomited twice. At eight in the evening the pulse had fallen to 55, and was manifestly irregular and intermittent. Respiration seemed difficult. The animal frequently changed its position and uttered half stifled cries; it retained its intelligence. The following day, at half past eight in the morning, the beat of the heart had risen to 70 pulsations in the minute; the general condition of the animal was improved, and it ultimately recovered.

"The fifth experiment was also made with the extracts of the viscera. Four grammes were administered to a rabbit, which died in a few minutes. The experimenters thought that its rapid death was owing to some accidental complication—perhaps syncope—having hastened the action of the poison.

"The sixth experiment was performed on three frogs. After having laid bare the heart in each, and observed that the pulsations in the three were perfectly equal, the experiment proceeded as follows:—

"1. The first frog was left in a normal condition, care only being taken to preserve the humidity of the heart.

"2. The second frog. Six drops of a solution containing one centigramme of digitaline in six grammes of water were injected under the skin of the belly.

3. The third frog. Fifty centigrammes of the extract made from the shavings of the floor on which the vomited matters had been spilt were injected under the skin of the belly.

"The following variations in the number and beats of the heart were observed in the three animals:—

Minutes.	No. 1. Pulsations.	No. 2. Pulsations.	No. 3. Pulsations.
After 6	42	20	26
" 10	40	16 irregular.	24 irregular.
" 20	40	15 id.	20 id.
" 28	38	0	12 very irregular.
" 31	36	0	0

This experiment was repeated several times with the same result.

"The experts relied on the first experiment as proof of the fact that the vomited matters contained poison. The third demonstrated that the poison did not previously exist in the floor of the room. The fourth was held to prove that the stomach and intestines of the deceased contained the same poison, but in less quantity than the vomited matter, the dog having recovered from its effects. The sixth experiment on the frogs was instituted to demonstrate the nature of the poison used. The experimenters did not consider it of the highest importance, but it corroborated the former ones. It pointed to that group of organic poisons which are known especially to affect the heart's action, and heightened the probability that death had been caused by digitaline. The report of M. Tardieu drew a comparison between the symptoms exhibited by the first dog and those noticed in the last illness of the deceased. In both there were repeated and violent vomitings, and rapid loss of power. In both the pulse was irregular and intermitting; in both the heart's action was tumultuous and irregular, apparently ceasing at times, until it was finally suppressed. The following were the conclusions of the report:—

"1. Madame de Pauw died from the effects of poison.

"2. The poison which killed her was one of those vegetable poisons which do not leave characteristic traces in the organs of the body, nor can they be isolated by chemical analysis. They reveal their presence by their effects, and are detected by their deadly action on living beings.

"3. We obtained from the vomited matters and the organs of deceased submitted to analysis a very energetic poisonous principle which, when administered to animals, produced analogous effects to those observed in Madame de Pauw, and killed them in the same manner.

"4. These effects and this action have a strong resemblance to those of digitaline, and without asserting it as a fact, there is a strong presumption that Madame de Pauw was killed by that agent.

"5. That deceased was not really ill before the day which preceded her death.

"6. The *post-mortem* examination proved that death was not caused by the effect of a fall, nor by an internal hæmorrhage, nor by an acute or chronic gastro-enteritis, nor by a perforation of the stomach, nor by any natural cause.

"We will only add that M. Tardieu's report is drawn up with marvellous clearness, minuteness, and perspicuity, and is a model in way of arrangement and execution for similar documents.

"We have now to examine the criticisms on the report of MM. Tardieu and Roussin, offered by M. Hébert, the expert employed for the defence. The first point noticed by M. Hébert was, that the unusual preservation of the body, as poisoning by any mineral substance was out of the question, did not favor the idea of poisoning. He next asserted that neither the chemical nor the physiological experiments made with the shavings on the floor on which the vomited matters had been spilt, were of any force. The reason for assigning no weight to the chemical experiments we have already noticed. The objections to the physiological experiments were the following:—The extract of the vomited matter contained organic matter in a state of decomposition, sufficient of itself to produce toxical effects. The dog in the first experiment exhibited a gradual and progressive retardation of the heart's action, and after death that organ was found in a state of contraction. There are two reasons for believing that death did not result from digitaline—the first, because MM. Bouley, Reynal, Delafond, Dupuy, and Stannius, have found that digitaline in small doses retards the heart's action, but accelerates it if given in considerable doses. Secondly, that in poisoning by digitaline the heart, instead of being contracted, is dilated and gorged with blood." *

"The evidence of MM. Claude Bernard, Vulpian, Bouley and Reynal was taken on the question raised by M. Hébert, whether, after poisoning by digitaline, the heart was contracted as asserted by the experts, or dilated as stated by M. Hébert. M. Claude Bernard stated, as the result of his experiments, that in the higher animals, when poisoned with digitaline, there is at first agitation, then, after some hours, death takes place suddenly, as if from syncope. A particular characteristic of poisoning by this substance is that immediately after death red arterialized blood continues to be poured into the left cavities of the heart, because respiration continues after the complete

arrest of the cardiac pulsations. Death, therefore, occurs from the cessation of the heart's action, and at first the organ is dilated by the blood which continues to flow into its cavities. But cadaveric rigidity follows much more rapidly in the muscular structure of the heart than in the other muscles of the organism. Contraction of the ventricles, therefore, rapidly replaces the dilatation, and in the course of a very few minutes they empty themselves of the blood which has been poured into them. A quarter of an hour after death the state of contraction is clearly manifest, and the rigidity continues. In answer to questions put by M. Hébert, M. Claude Bernard said that there was nothing in the condition of the dog poisoned in the first experiment which appeared to him to contra-indicate the idea of poisoning by digitaline. But the experiment would have been more convincing had the autopsy been made a few minutes instead of two hours after death. In his experience there is often in poisoning by digitaline at first an acceleration of the heart's movements, but that finally retardation sets in, and continues to increase until complete arrest terminates life.

"M. Vulpian's evidence referred to the effect of digitaline on frogs. He dissented from the statement of Stannius that digitaline did not affect batrachian reptiles. On the contrary, he found that the action of digitaline was most powerful on frogs. When injected under the skin it produced in a few minutes manifest changes in the movements of the heart; the auricles begin to contract somewhat irregularly, but the movements of the ventricle are especially affected; they contract with great irregularity, certain points of the ventricle appearing to escape the general movement; at the same time the pulsations become slower and slower, and after some minutes the heart becomes motionless. The ventricle stops first and remains empty, pale, and contracted; the auricles continue for a short time to act, but too feebly to force the blood into the ventricle; they remain fully dilated after the contraction of the ventricle. There is also this peculiarity observed, that even after the arrest of the heart's action the frog will continue to leap about with but little less vivacity than in the normal condition. There are several other poisons which act in the same way as digitaline when introduced under the skin of the frog; these are, the poison of the toad and of the aquatic salamander, *Upas antiar*, alcoholic extract of *Tanghinia venenifera*, and watery and alcoholic extracts of the *Veratrum viride*. M. Vulpian concluded by stating that he had tried other vegetable poisons and tannin, and had never observed analogous phenomena.

"The experiments of MM. Bouley and Reynal had been made with digitaline on horses. They had never observed the cardiac ventricles contracted. On the contrary, the heart had always appeared flabby: but as the examinations were made five or six hours after death, this might have been due to the commencement of putrefaction, which takes place much more quickly in herbivora than in carnivora, especially after death by the vegetable poisons."

Cannibalism.—In Africa there are two kinds of cannibalism. The one is sacrificial, and is performed by the priests, whose office it is to

eat a portion of the victim, whether man, goat or fowl. This custom, prevalent among many ancient nations, is still extant in many parts of North Guinea, especially in the Delta of the Niger.

The other is simply an action of *gourmandise*. A cannibal is not necessarily ferocious. He eats his fellow creatures, not because he hates them, but because he likes them. A craving for meat, to which the natives of these parts are subject, and for which, in all their dialects, there is a special term, may first have suggested the idea; but I am rather inclined to believe that it is a practical extension of the sacrificial ceremony. Neither the women nor the young men are allowed to touch the dainty; it is reserved by the patriarchs, and the head, which is supposed to contain a grand fetish, falls to the king.

Although the missionaries had mixed a great deal with the Fans, they told me that they had never got a clear confession of cannibalism from one of them, though they had "no more doubt that the Fans ate men than they had that they ate plantains." It was, however, never denied of the tribe, but only of themselves as individuals. Thus the natives of village A would deny stoutly that they were cannibals, but they would accuse the villagers of B. The villagers of B would deny the soft impeachment, and denounce the natives of A as cannibals of the most confirmed order. Similar answers had been returned to me by the Fan slaves whom I had met with among the Bush tribes of the Muni. They did not eat men, but the other people of their tribe did.

I resolved to exercise a little finesse in the investigation of this matter, and after I had passed the villages which had previously been inhabited by white men, I called a veteran cannibal to me and questioned him about the people beyond the mountains to the east. Did they eat men? Oh yes, they all ate men. And he ate men himself. As he volunteered this statement, he burst into a loud roar of laughter, in which we all joined very heartily. I asked him if man was good. He replied, with a rapturous gesture, that it was "like monkey, all fat." I then wished to learn the class of persons he had been in the habit of discussing. He said, only prisoners of war; that some of his friends were in the habit of eating witches condemned to death, but that for his part he did not think them wholesome. The best of it was that he thought I was a cannibal too; a belief which is universal among the bush tribes of Western Africa, and of which the slave trade has been the cause. I remember that when I was in the Camma country, a Bakeli slave, who had been brought down from the far interior, and who had never seen a white man before, squatted before me, with his great, round, prominent eyes on my face, and his mouth wide open. At last he heaved a gasp of wonder, crying, "and are these the men that eat us?"—*Winwood Reade's "Savage Africa."*

New Hampshire Asylum for the Insane.—From the last Annual Report of Dr. Bancroft, Superintendent of the Asylum, we learn that on the 1st of May, 1863, there were in the house 204 patients, of whom 94 were males, and 110 were females. There have been admitted since that time 105—56 males and 49 females—making in all who have enjoyed the benefits of the Asylum 309, namely, 150 males and 159 females. Sixty-nine have been discharged, of whom 38 were

males and 31 one females. Twenty-nine males and 14 females have died. There are remaining in the Asylum on the 1st day of May, 1814, 217; of these 103 are males, and 114 are females. The largest number on any day was 219; the smallest number was 192.

THERE were 76 deaths in Providence during the month of June. The mortality of the first six months of the present year has been 35 greater than in 1863, and 104 greater than the average for nine years. During the last two months, it has not been greater than the average, taking into consideration the increase of population. Scarlatina still continues with considerable severity, and the number of deaths (42) during the first six months of this year is the same as during the whole year 1863.

ROBERT M. DE WITT, of New York, has in press, and will publish in a few weeks, a new work on "Morbid Tumors," by Rudolf Virchow, Professor of Pathological Anatomy, &c., Berlin.

NOTICE.

IT will be recollected that the subject of increasing the subscription price of the JOURNAL was brought to the notice of its readers before the commencement of the 68th volume, at a time when many of the newspapers and other periodicals of the day were raising their prices. It was decided, however, that the old terms should be continued, but that the number of pages in the weekly issues would probably have to be reduced, either occasionally or constantly. The price was accordingly continued, but no reduction in the number of pages has since been made. The time has now arrived when it is impossible longer to avoid the adoption of one or the other of these plans; and of the two, an increase in price is the one, we think, most likely to be satisfactory. This also conforms to the plan adopted by other medical journals of the country, and to that publicly agreed upon by the publishers of weekly periodicals in this city. After the termination of the current subscription year of each subscriber, therefore, our subscription price will be $4 a year, and the same to all new subscribers after the 1st of August next, or the beginning of the 71st volume. We need not assure our readers that on our part we shall spare no effort to continue to make the JOURNAL worthy of their support. New subscribers for the current year from February last, will be charged but $3.

VITAL STATISTICS OF BOSTON.

FOR THE WEEK ENDING SATURDAY, JULY 16th, 1864.

DEATHS.

	Males.	*Females.*	*Total.*
Deaths during the week - - - - - - - - -	43	46	89
Ave. mortality of corresponding weeks for ten years, 1853—1863,	36.9	34.7	71.6
Average corrected to increased population - - - - -	00	00	78.81
Death of persons above 90 - - - - - - - - -	0	1	1

MARRIED,—In this city, 13th inst., Edward M. Skinner, M.D., to Miss Caroline M. Mair.—In Carlisle, Mass., 13th inst., H. C. Robbins, M.D., 1st Ass't Surg. 101st Ill. Vol. Inf'try, to Miss M. Lizzie Prescott, of Carlisle.

DEATHS IN BOSTON for the week ending Saturday noon, July 16th, 89. Males, 43—Females, 46.—Abscess, 1—accident, 4—disease of the brain, 5—burns, 2—cholera infantum, 8—consumption, 17—convulsions, 2—croup, 3—debility, 3—diarrhœa, 1—diphtheria, 2—dropsy, 3—dropsy of the brain, 1—drowned, 1—dysentery, 2—scarlet fever, 2—typhoid fever, 2—hæmorrhage, 1—malformation of the heart, 1—disease of the hip, 1—homicide, 1—infantile disease, 1—intemperance, 1—disease of the kidneys, 3—disease of the liver, 1—congestion of the lungs, 3—inflammation of the lungs, 1—marasmus, 3—measles, 1—old age, 1—scirrhus, 1—scrofula, 1—smallpox, 2—suicide, 1—sunstroke, 1—syphilis, 1—ulcers, 1—unknown, 3.

Under 5 years of age, 40—between 5 and 20 years, 9—between 20 and 40 years, 16—between 40 and 60 years, 16—above 60 years, 8. Born in the United States, 56—Ireland, 24—other places, 9.